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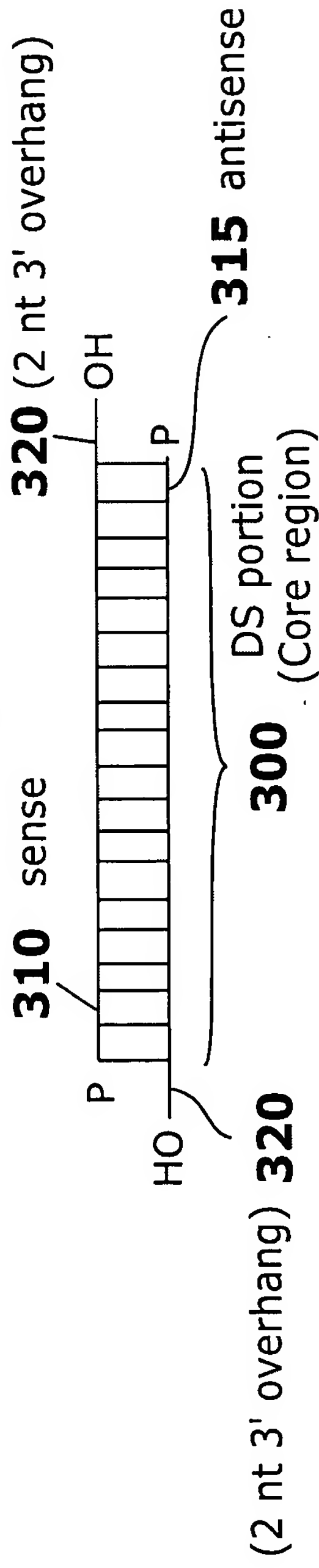


FIG. 1

RNAi IN DROSOPHILA

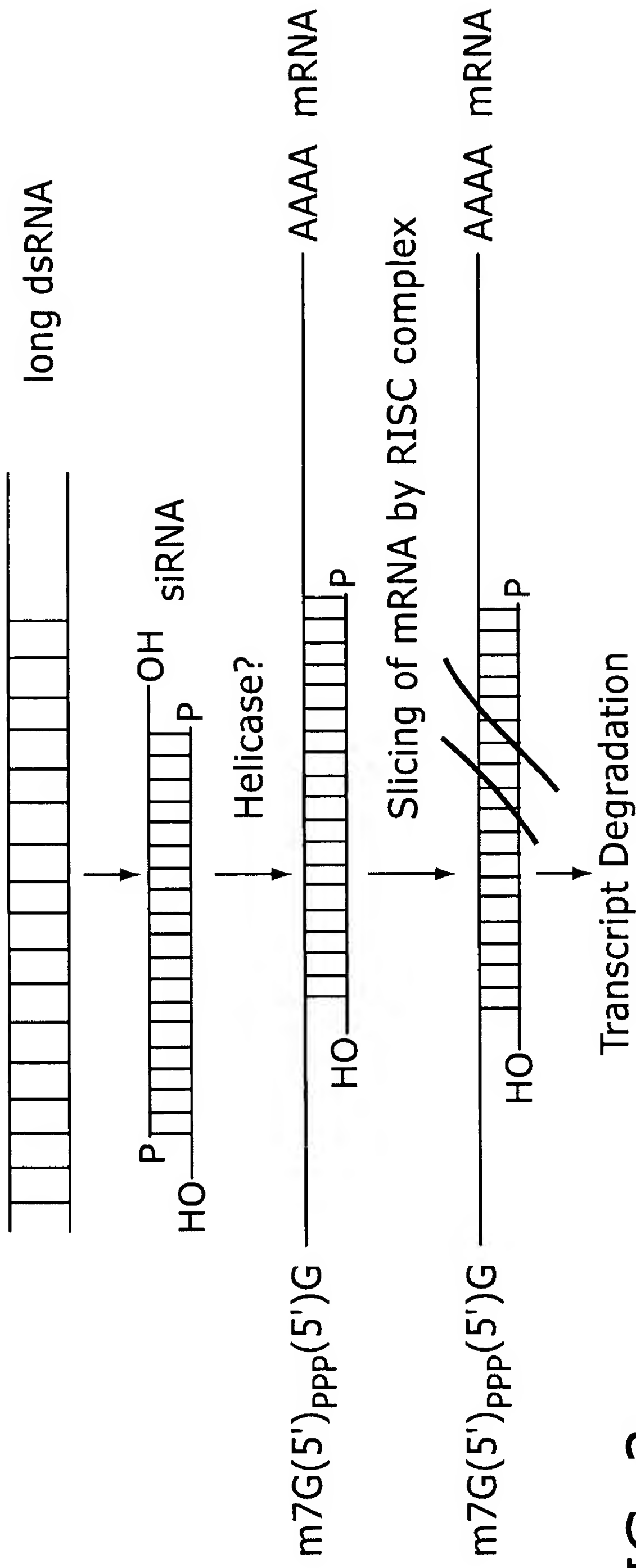


FIG. 2

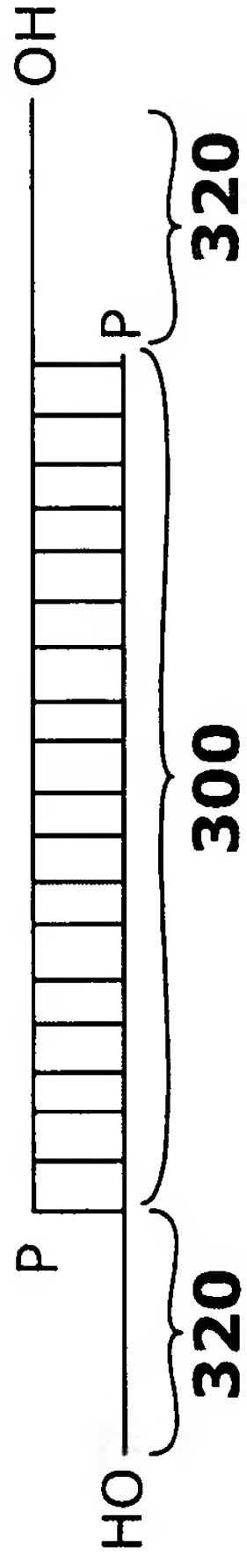


FIG. 3A

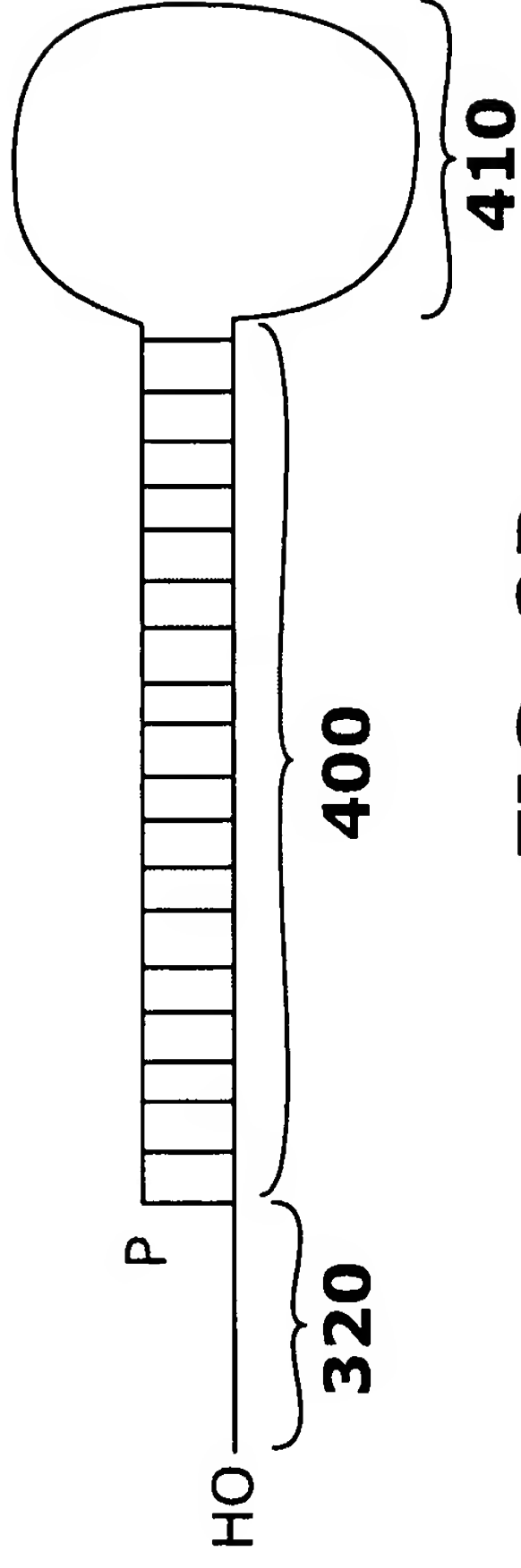


FIG. 3B

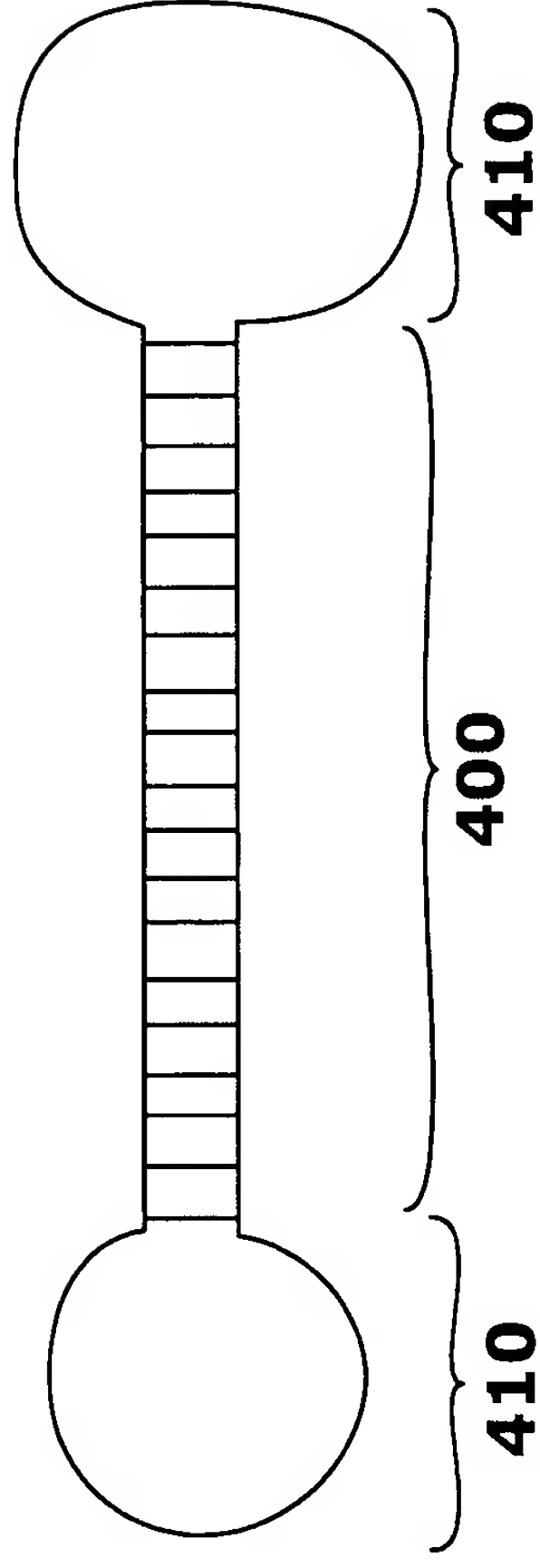


FIG. 3C

2-3 nt mismatches

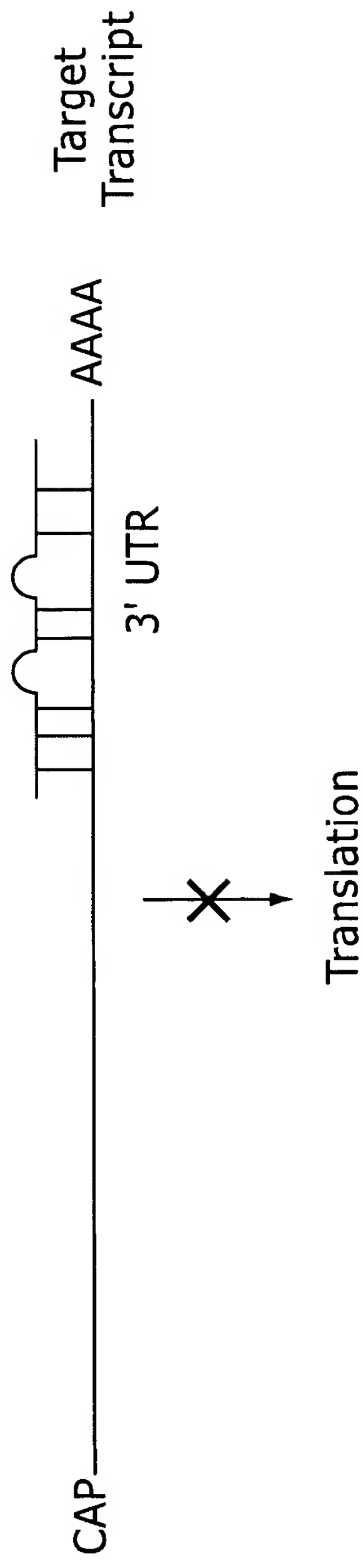
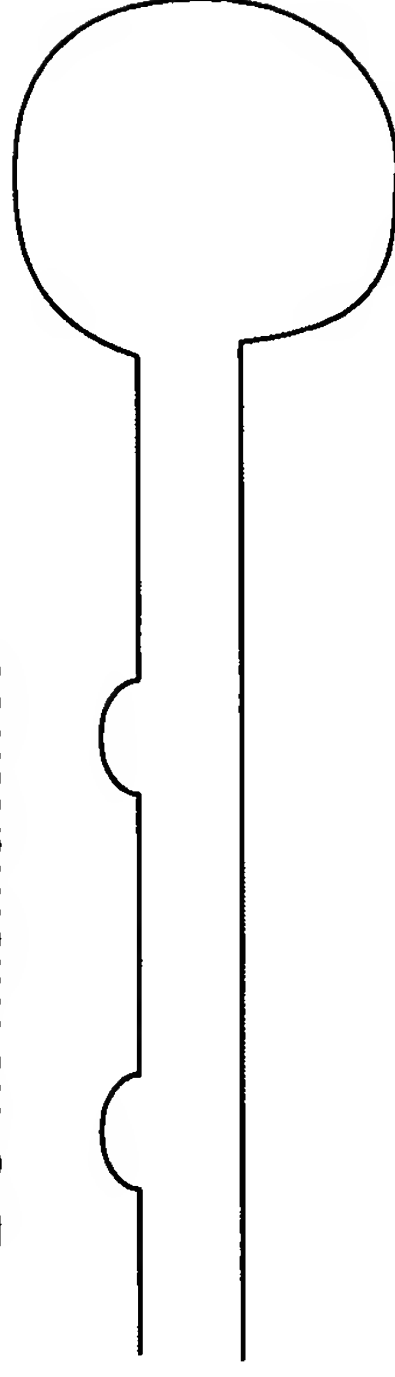


FIG. 4

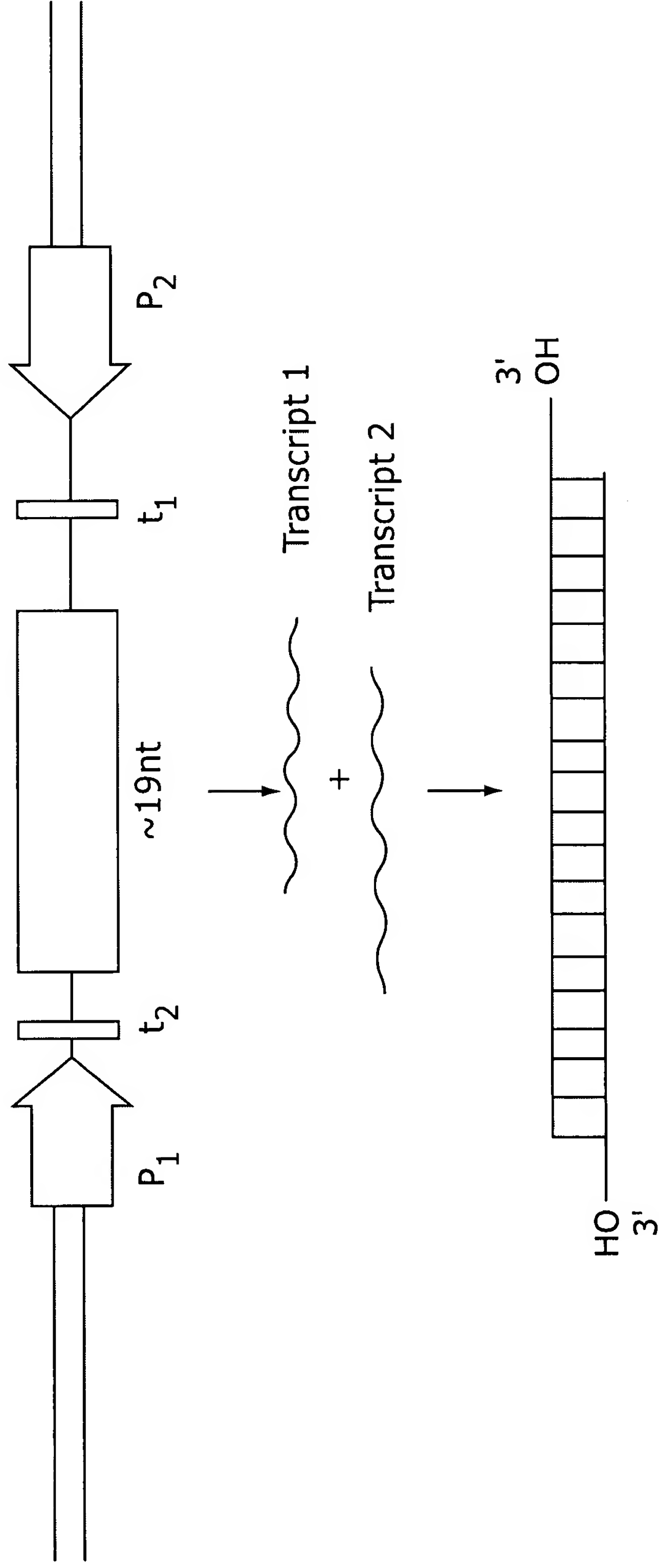


FIG. 5

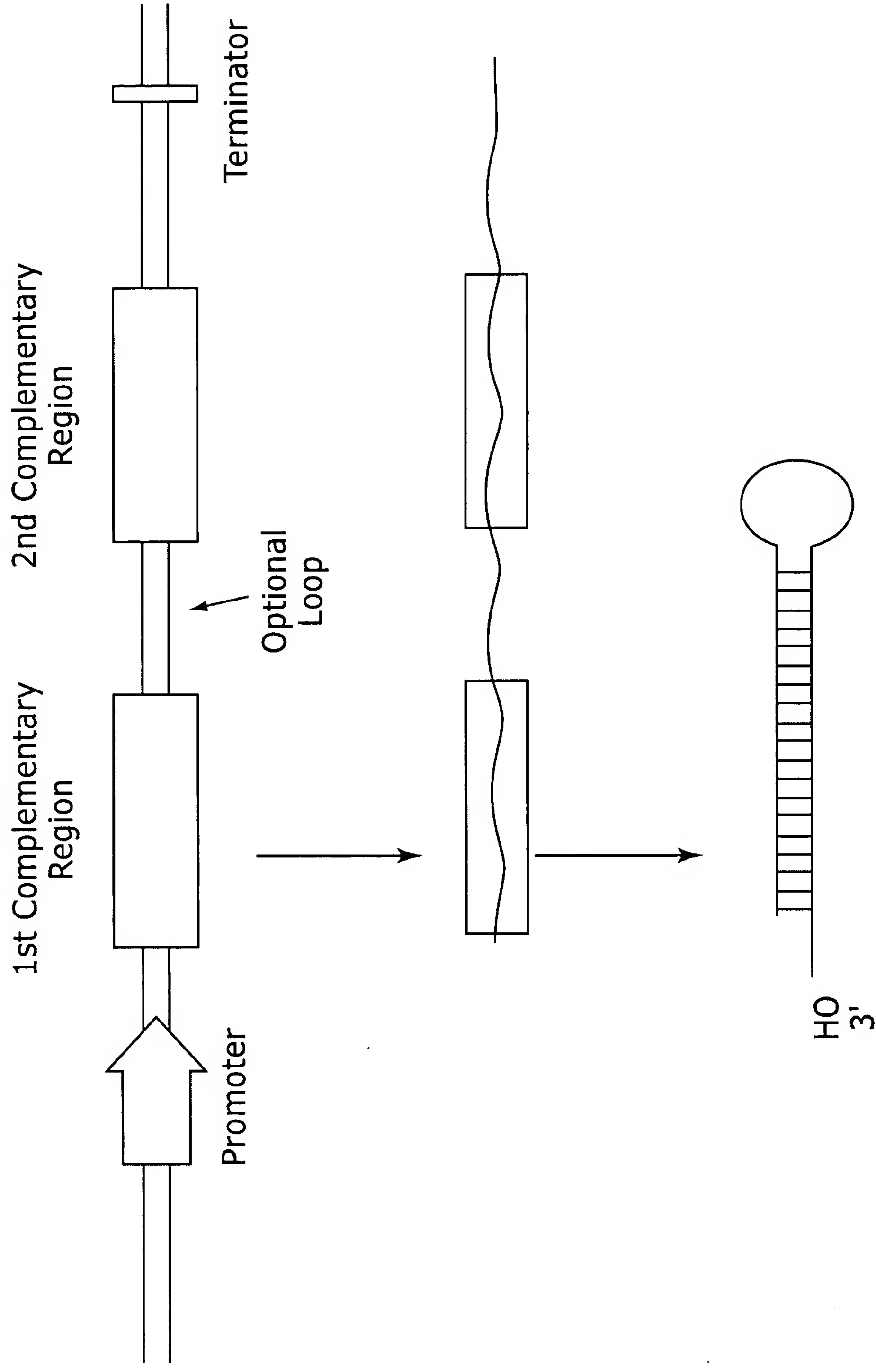


FIG. 6

NP-1496	ggaucuuuuuucucggagdttdt dtdtccuagaauaagaagccuc	SEQ ID NO: 3 SEQ ID NO: 4
NP-1496H	^u cgggg ^g ggaucuuuuuucucggag ^g ca ^g guccc ^{uu} ccuagaauaagaagccuc ^a cc ^u	SEQ ID NO: 28
GFP-949	ugcgcuccuggacguagccdttdt dtdt acgcgaggaccugcaucgg	SEQ ID NO: 2 SEQ ID NO: 1
GFP-949H	^u cgggg ^u ugcgcuccuggacguagcc ^g ca ^g guccc ^{uu} acgcgaggaccugcaucgg ^a cc ^u	SEQ ID NO: 29

FIG. 7A

NP-1496H	^u cgggg ^u ggaucuuuuuucucggag ^g ca ^g guccc ^{uu} ccuagaauaagaagccuc ^a cc ^u	GFP-949H	ugcgcuccuggacguagcc ^g ca ^g guccc ^{uu} acgcgaggaccugcaucgg ^a cc ^u	SEQ ID NO: 30
GFP-949H	^u cgggg ^u ugcgcuccuggacguagcc ^g ca ^g guccc ^{uu} acgcgaggaccugcaucgg ^a cc ^u	NP-1496H	ggaucuuuuuucucggag ^g ca ^g guccc ^{uu} ccuagaauaagaagccuc ^a cc ^u	SEQ ID NO: 31

FIG. 7B

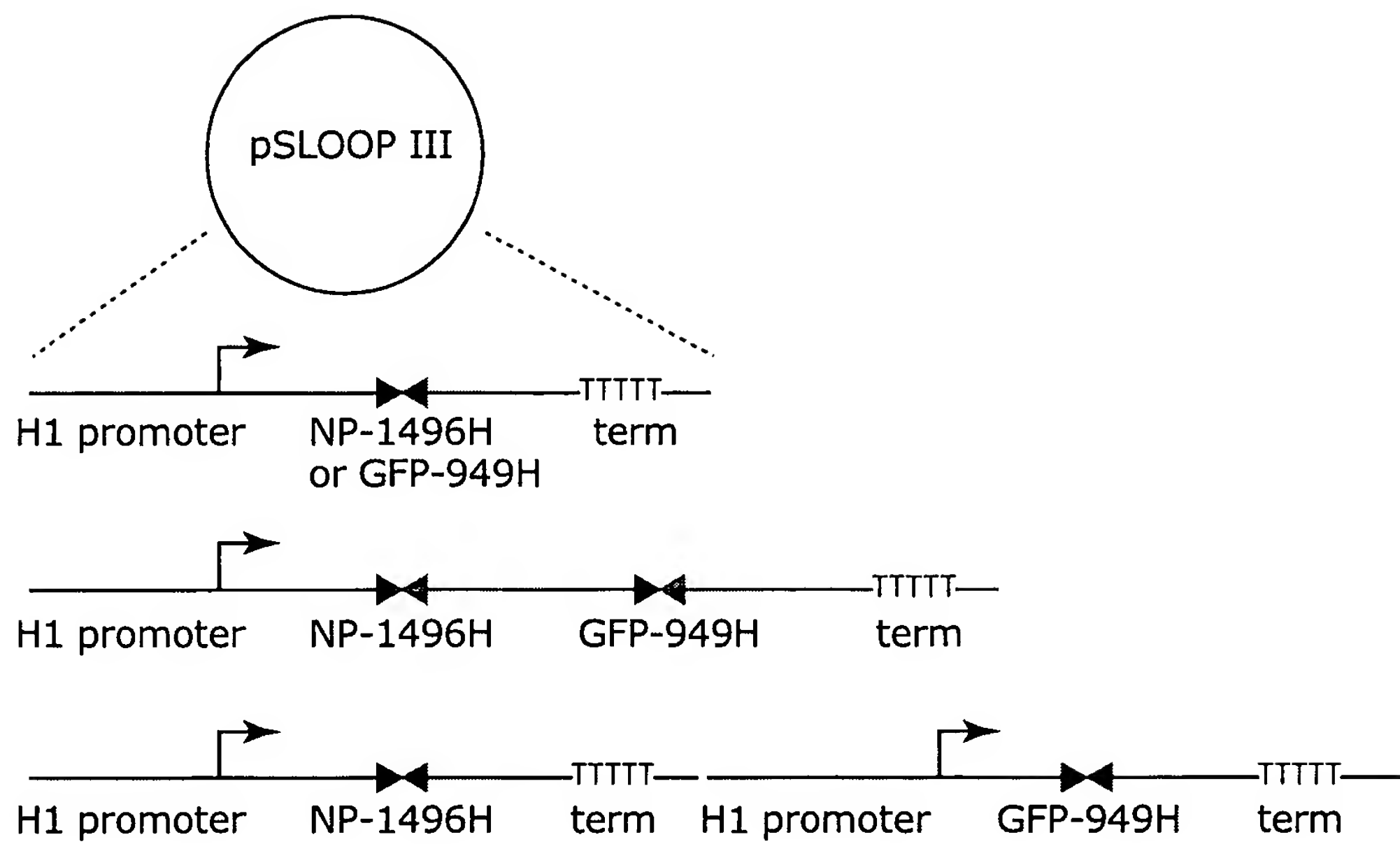


FIG. 7C

siRNA prevents influenza virus production in mice

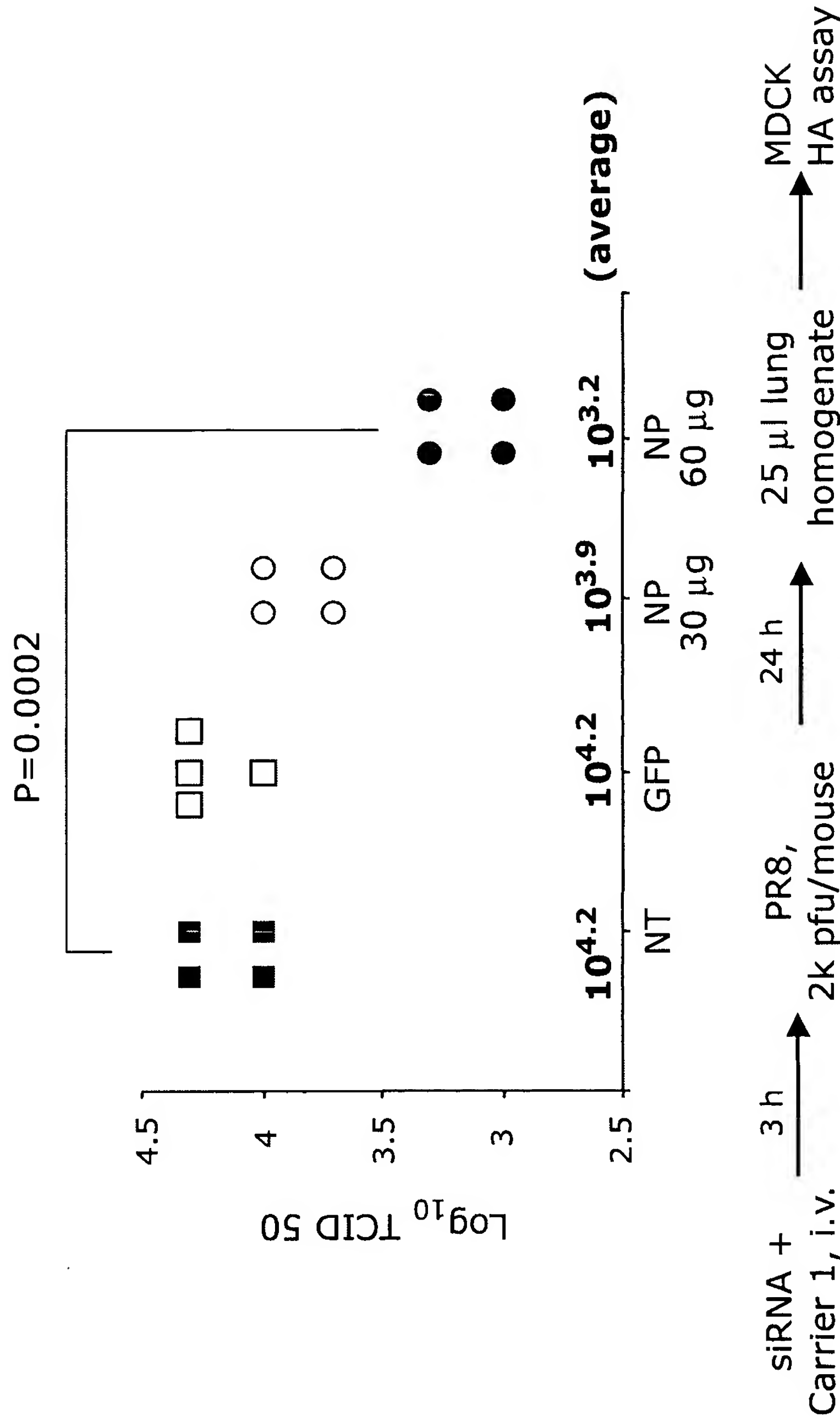


FIG. 8A

The in vivo transfection effect of Poly-L-Lysine (42k)

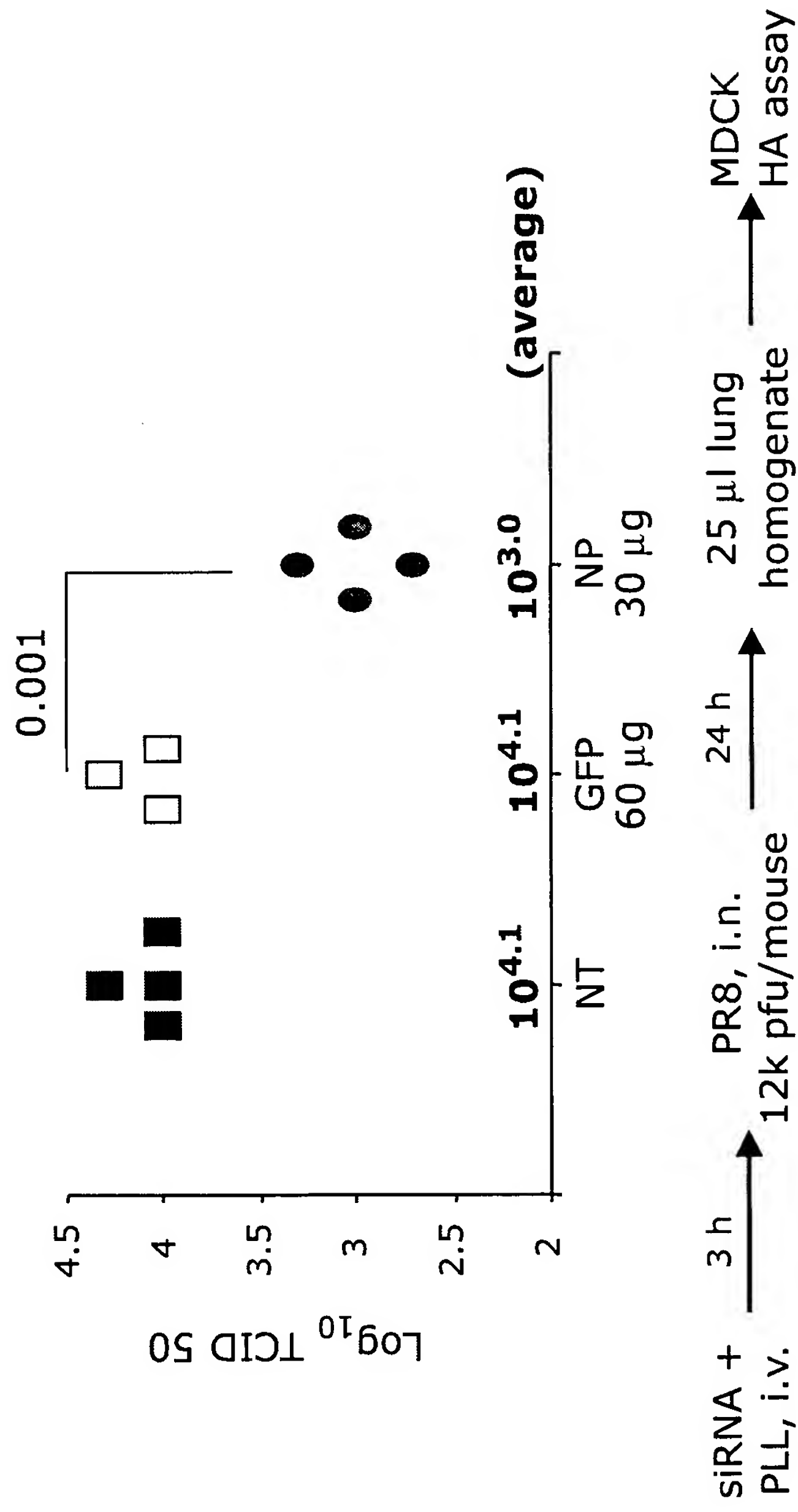


FIG. 8B

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siRNA prevents influenza virus production in vivo

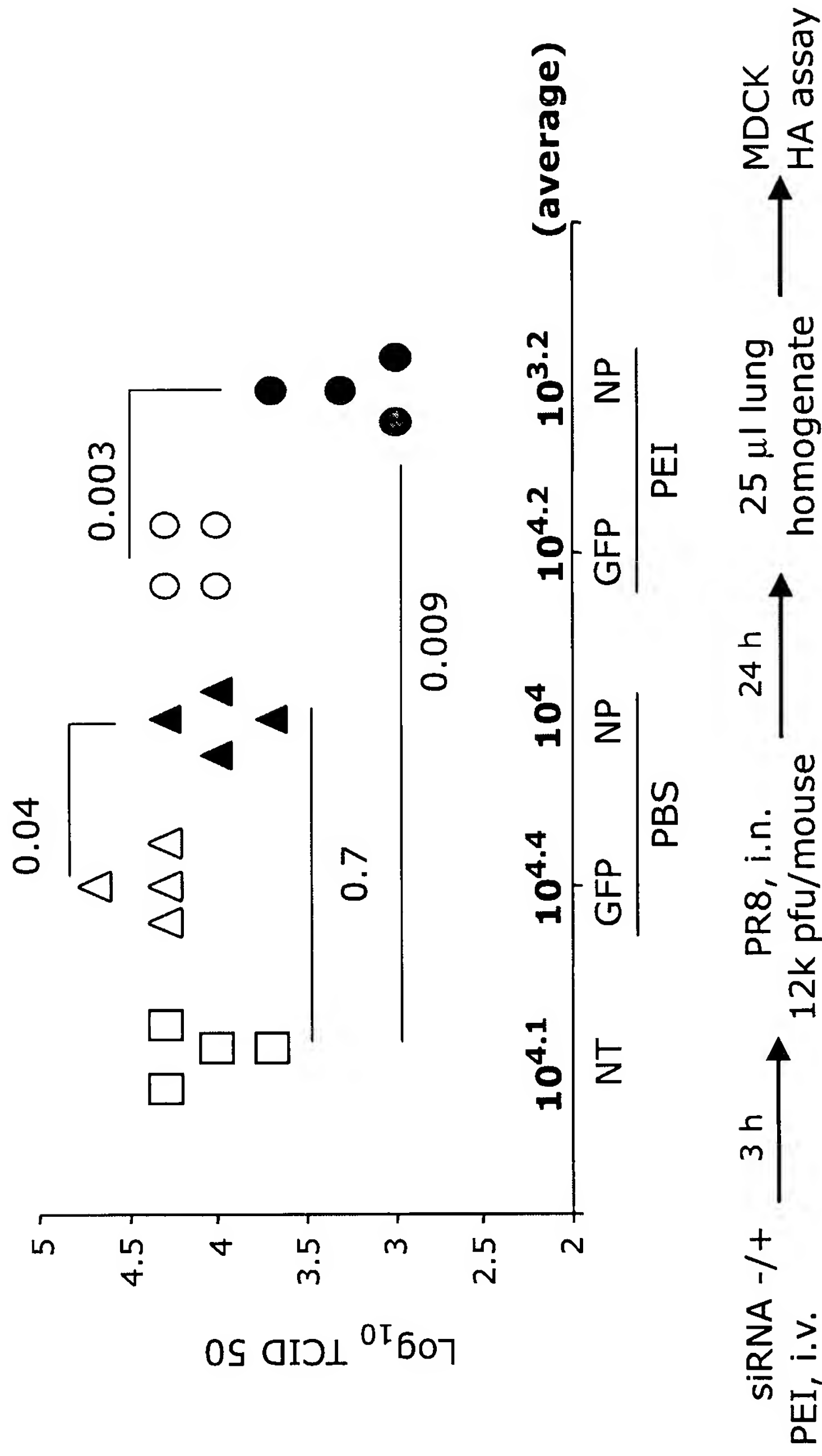


FIG. 8C

Additive/synergistic effect of siRNA against influenza virus in mice

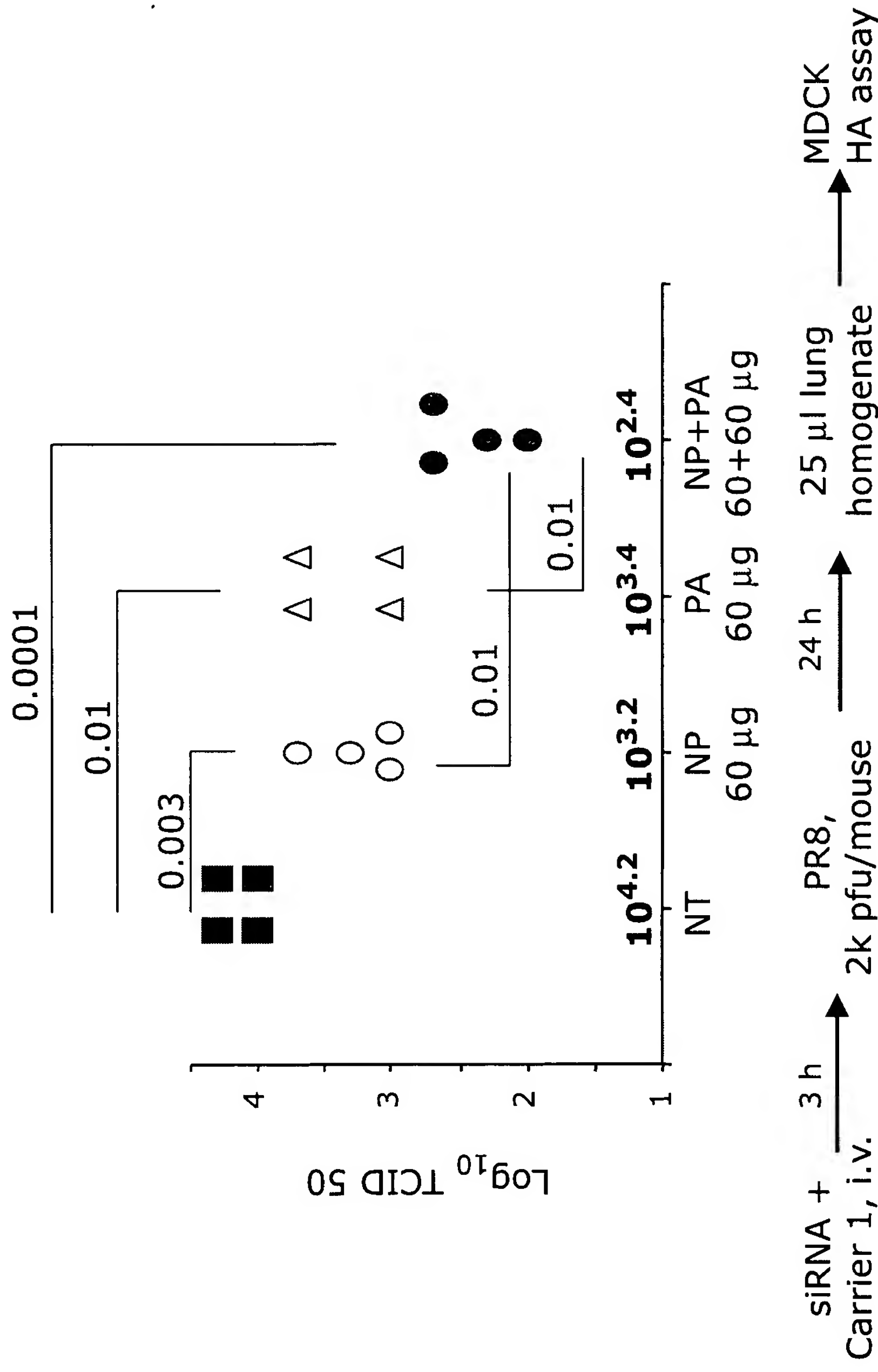


FIG. 9

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siRNA inhibits influenza virus production in infected mice

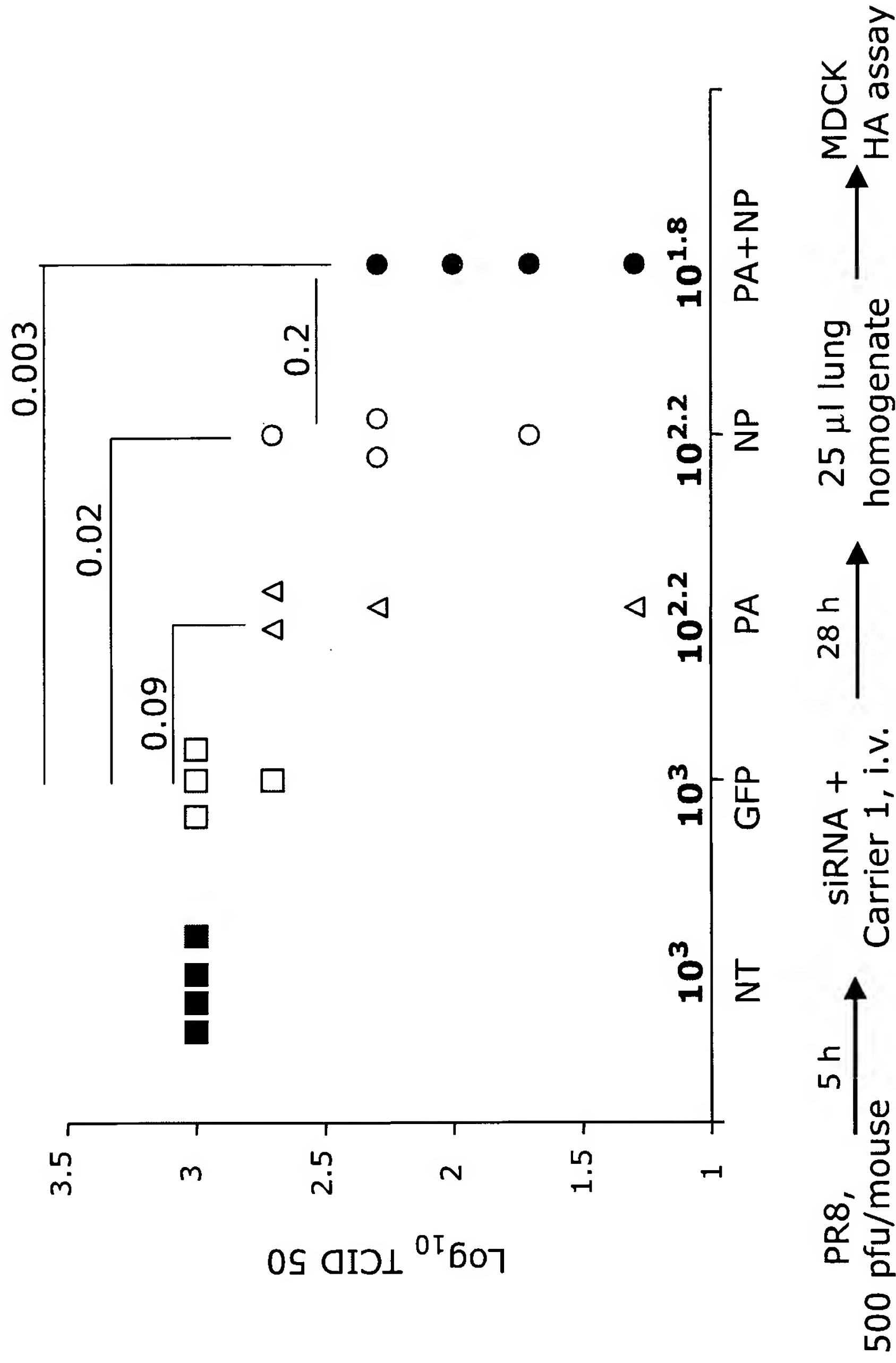


FIG. 10

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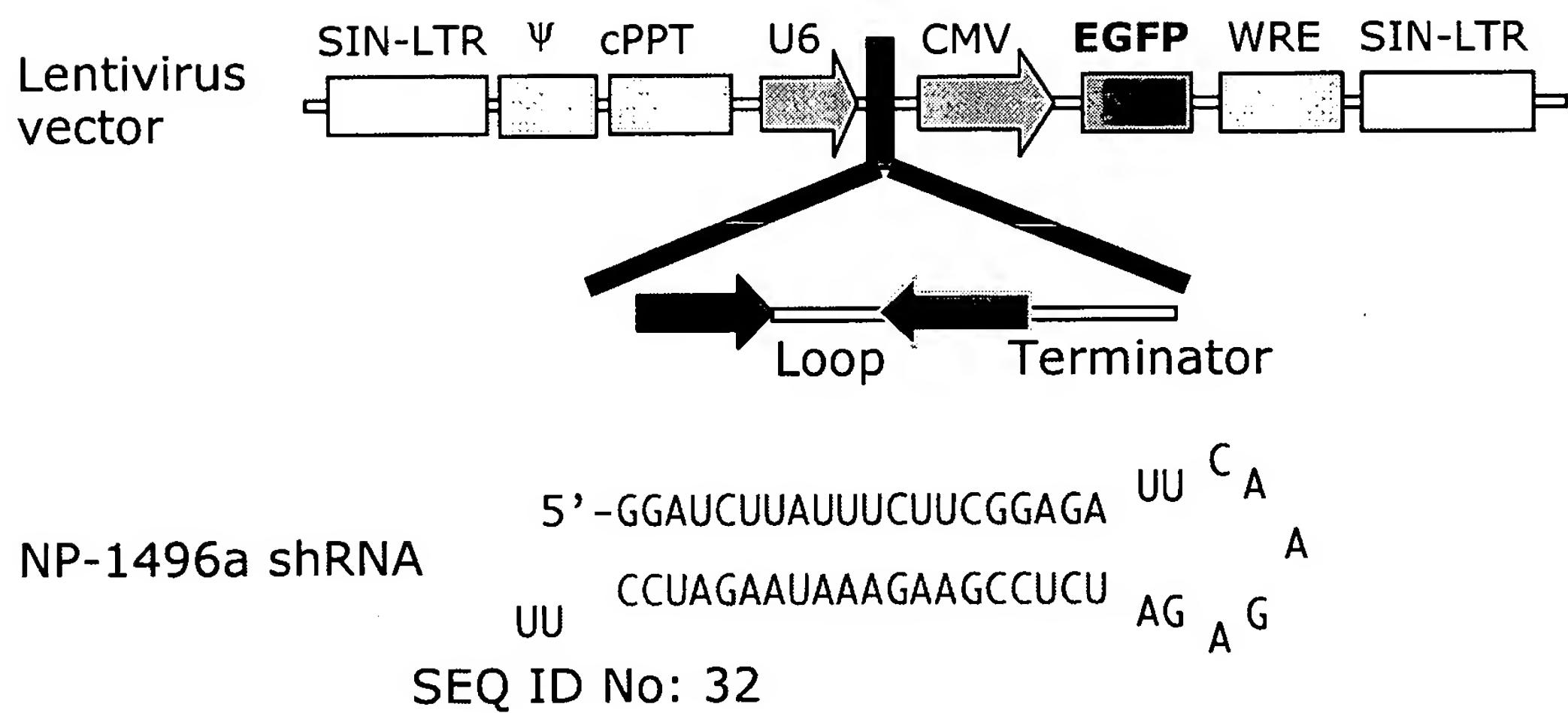


FIG. 11A

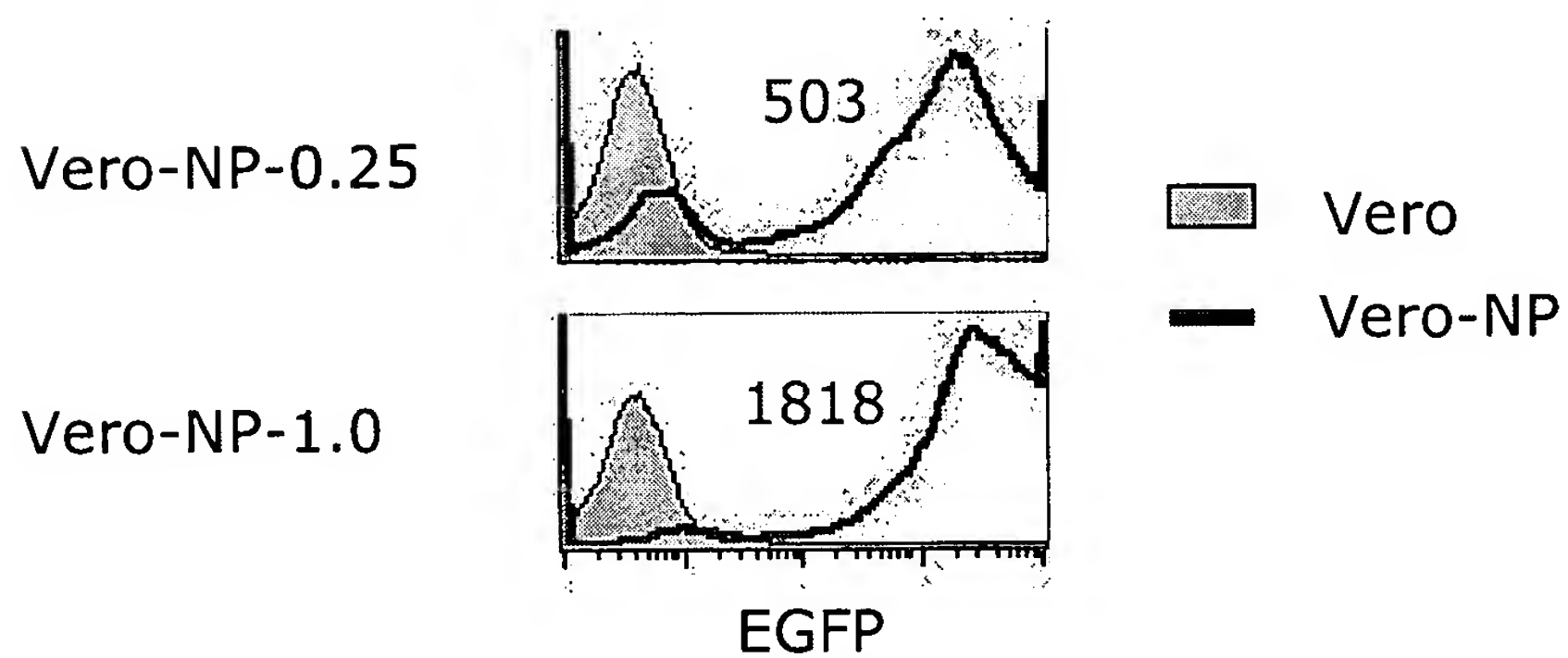


FIG. 11B

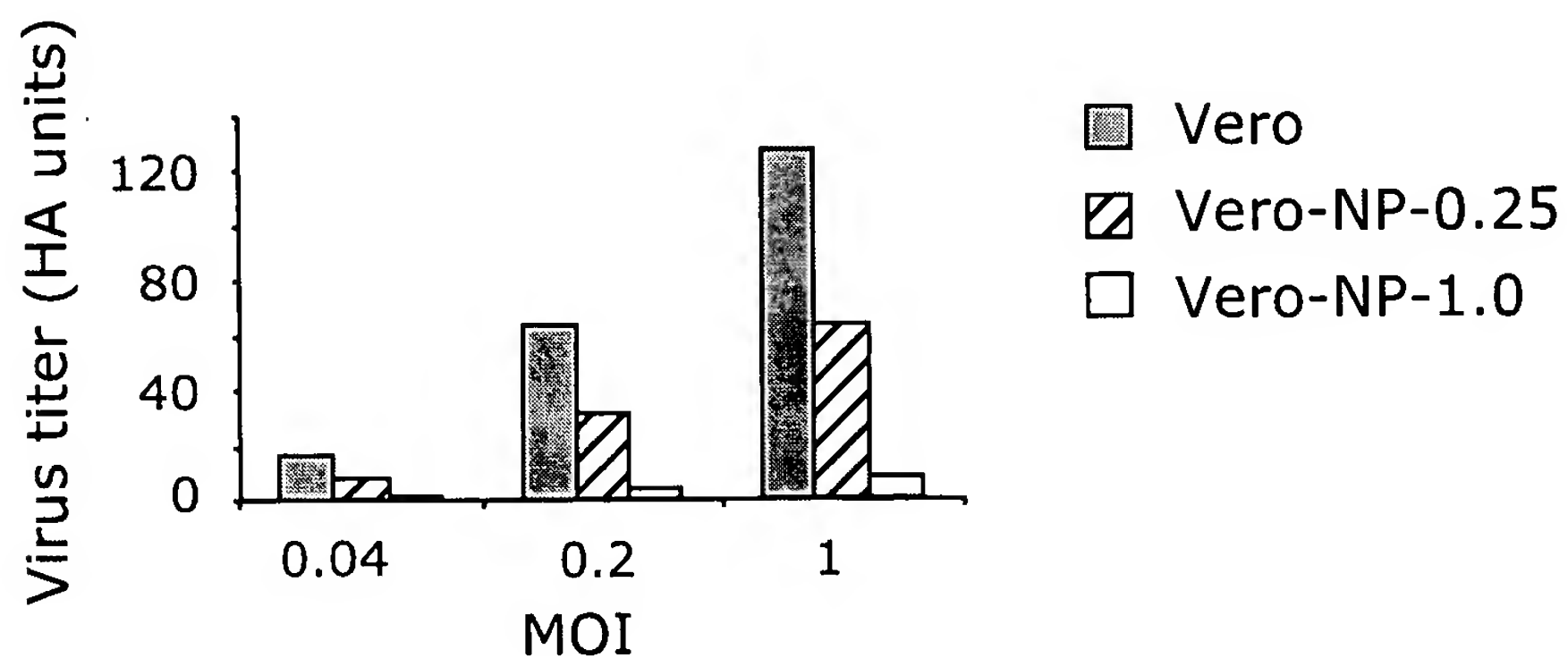


FIG. 11C

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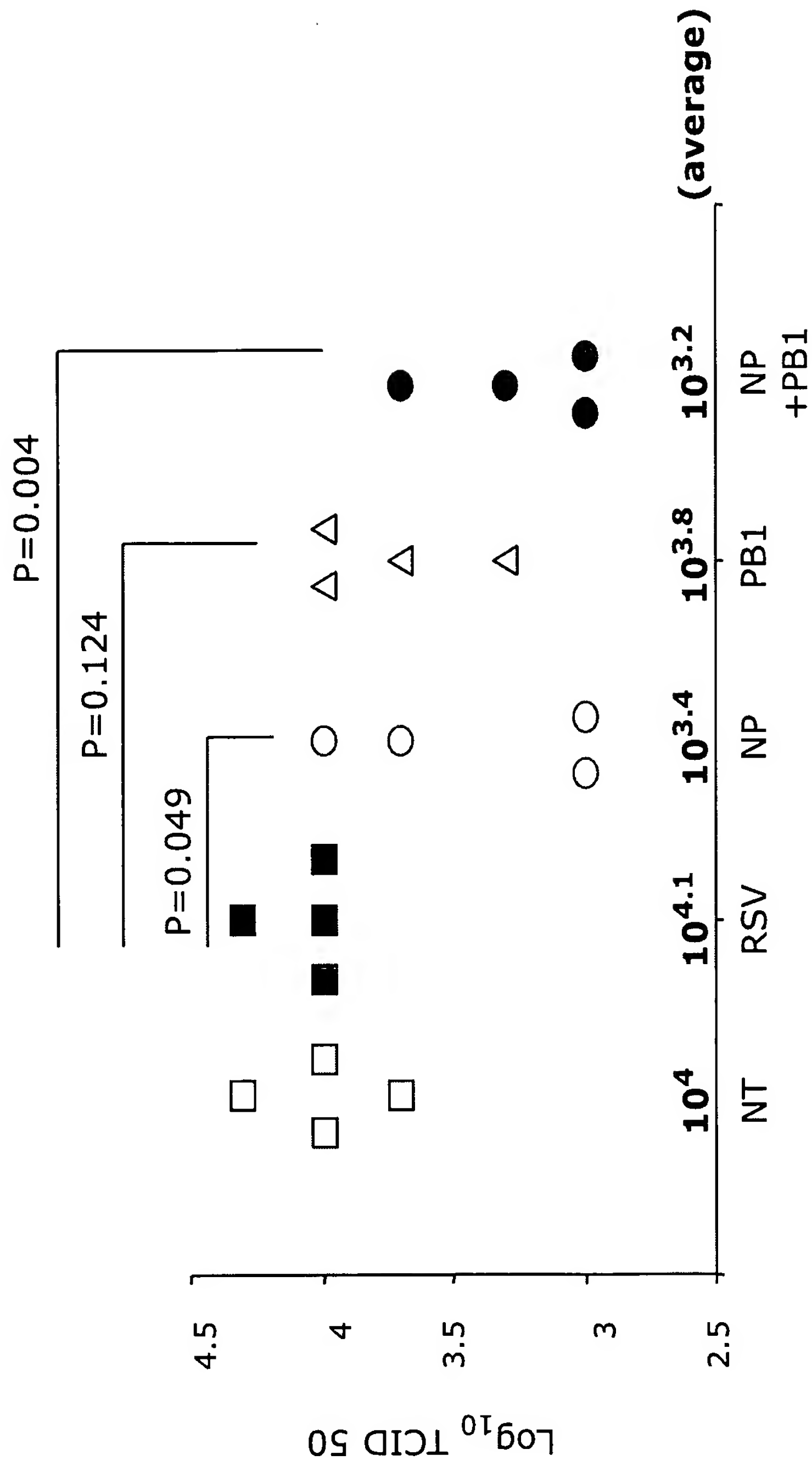
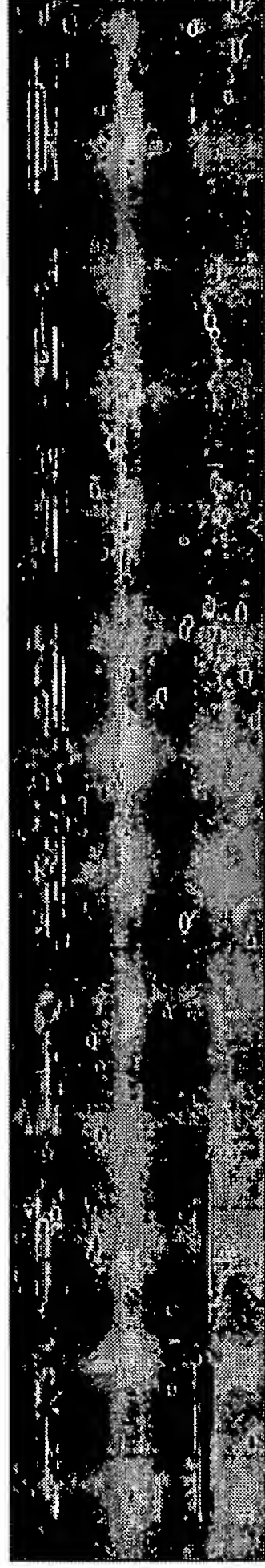


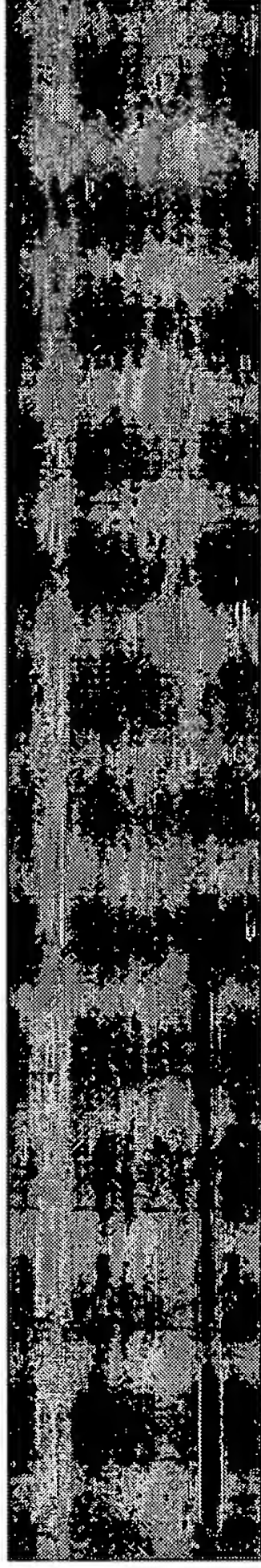
FIG. 12

Electrophoretic retardation of siRNA with poly-L-lysine

Polymer	0	0.1	0.2	0.5	1	2	4	8
SiRNA	1	1	1	1	1	1	1	1



41.8K



8.4K

FIG. 13A

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Electrophoretic retardation of siRNA with poly-L-arginine

PLA	0	0.02	0.06	0.17	0.5	1.5	4.5	13.5	43.5
siRNA	1	1	1	1	1	1	1	1	1

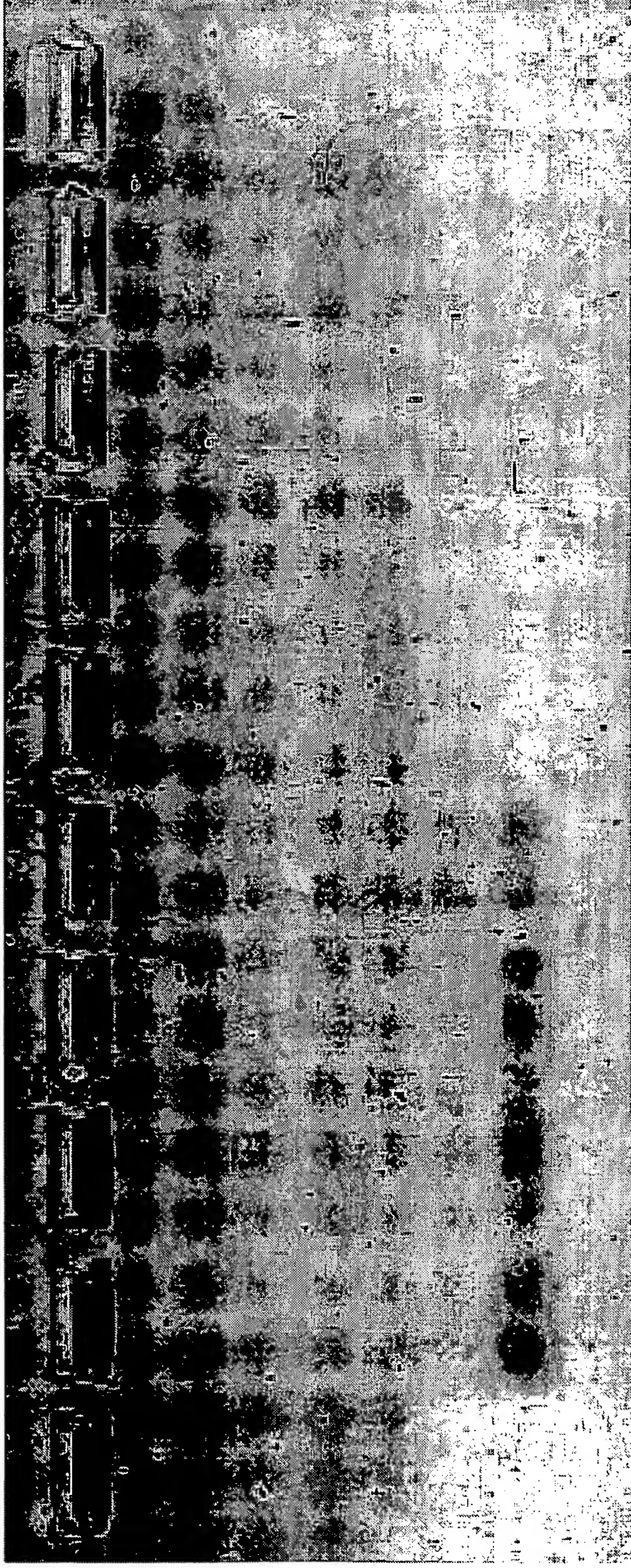


FIG. 13B

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Comparison of poly-L-lysine with different molecular weights

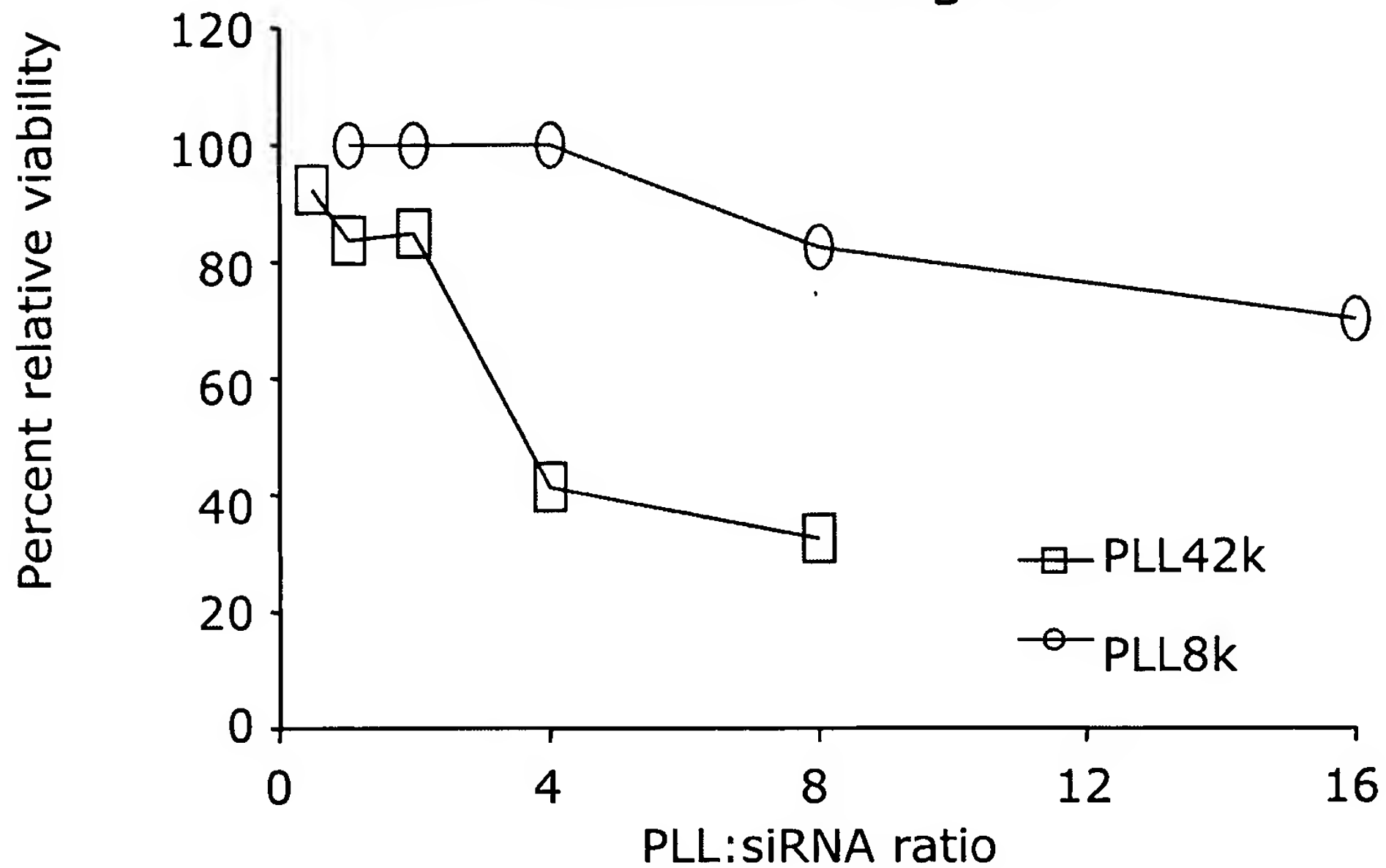


FIG. 14A

In vitro cytotoxicity of poly-L-arginine

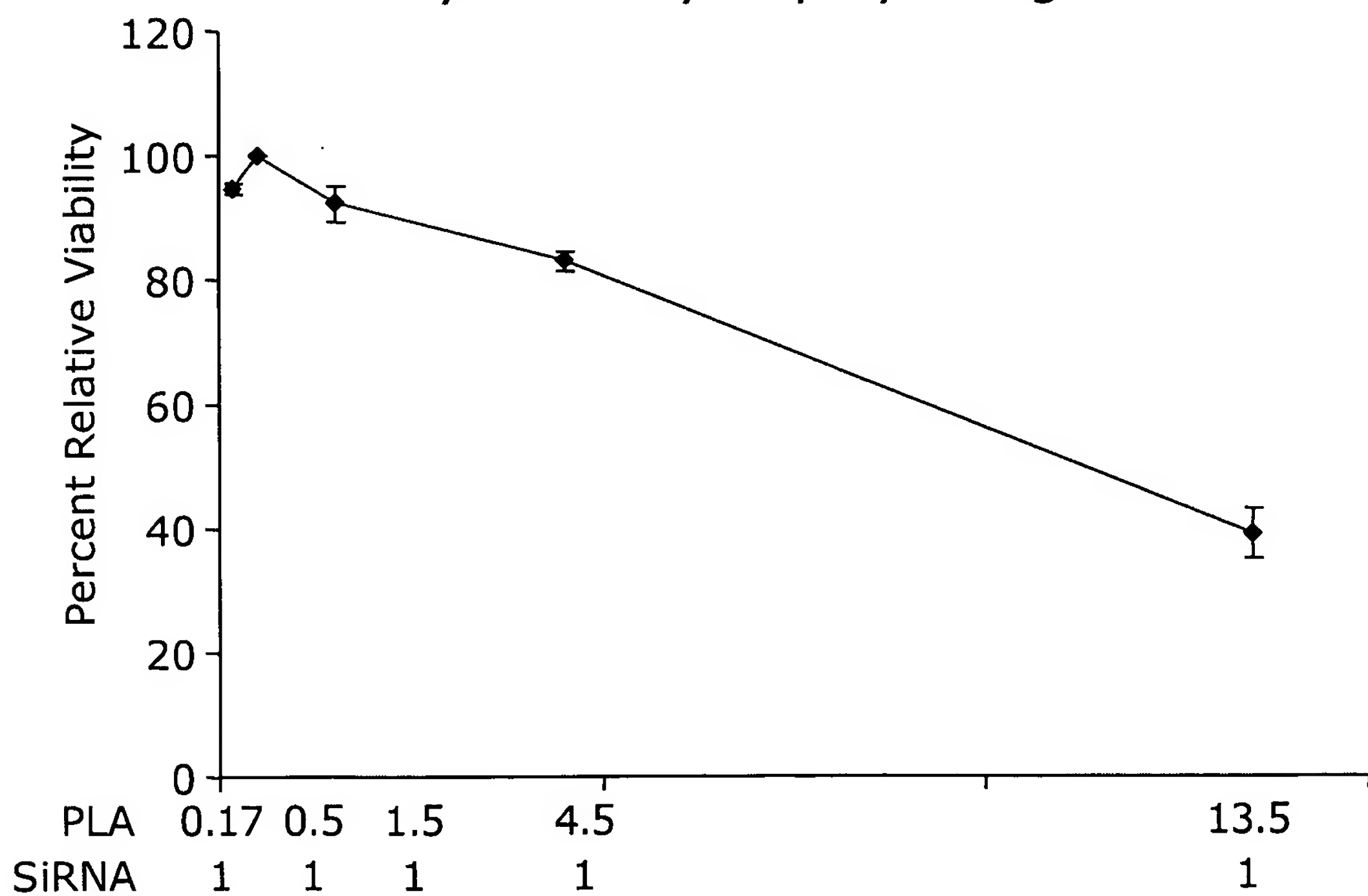
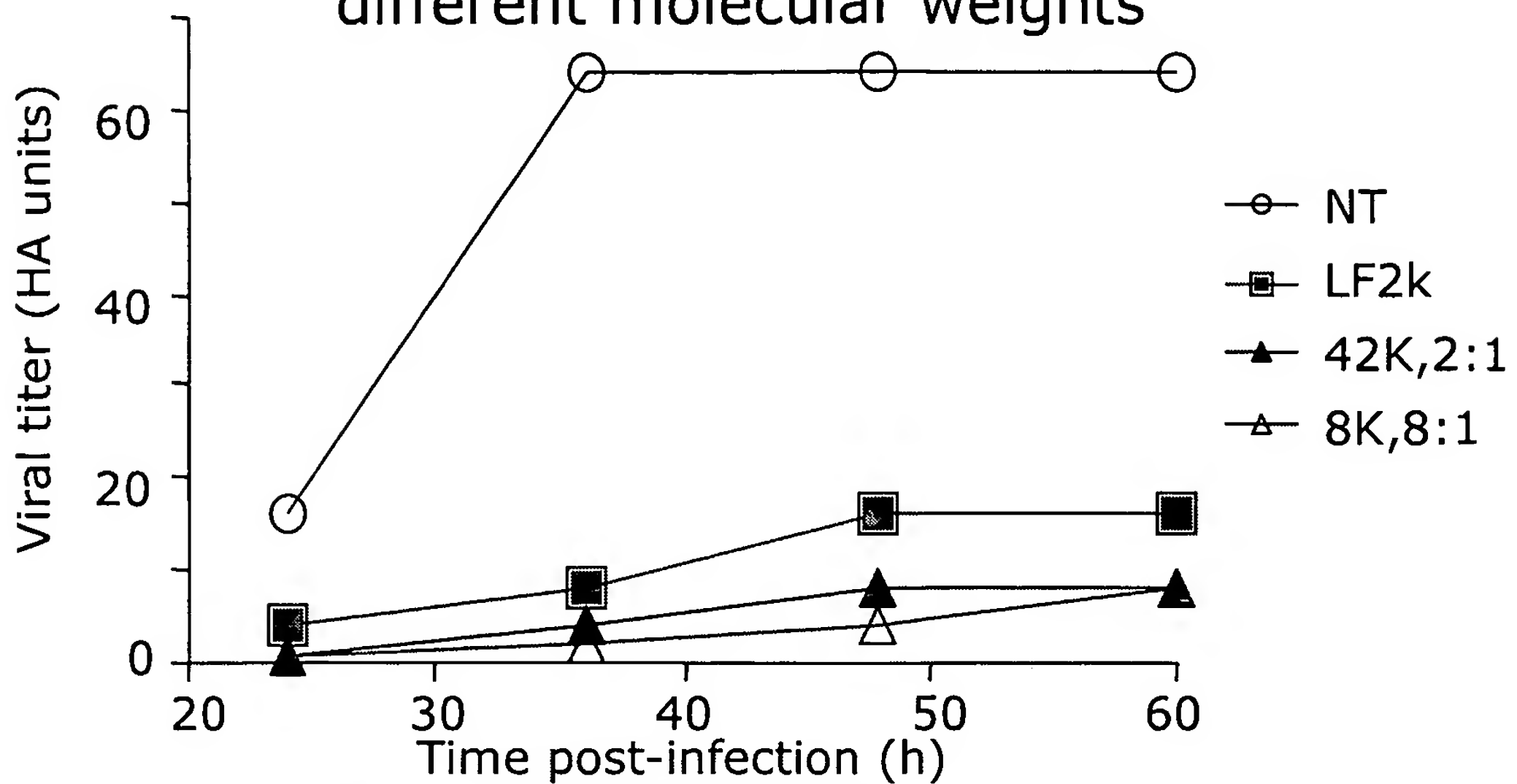


FIG. 14B

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Comparison of poly-L-lysine with different molecular weights



siRNA: 4×10^{-10} M
 42K PLL: 2.9×10^{-10} M
 8.4K PLL: 57×10^{-10} M

FIG. 15A

Poly-L-arginine helps cellular uptake of siRNA in vitro

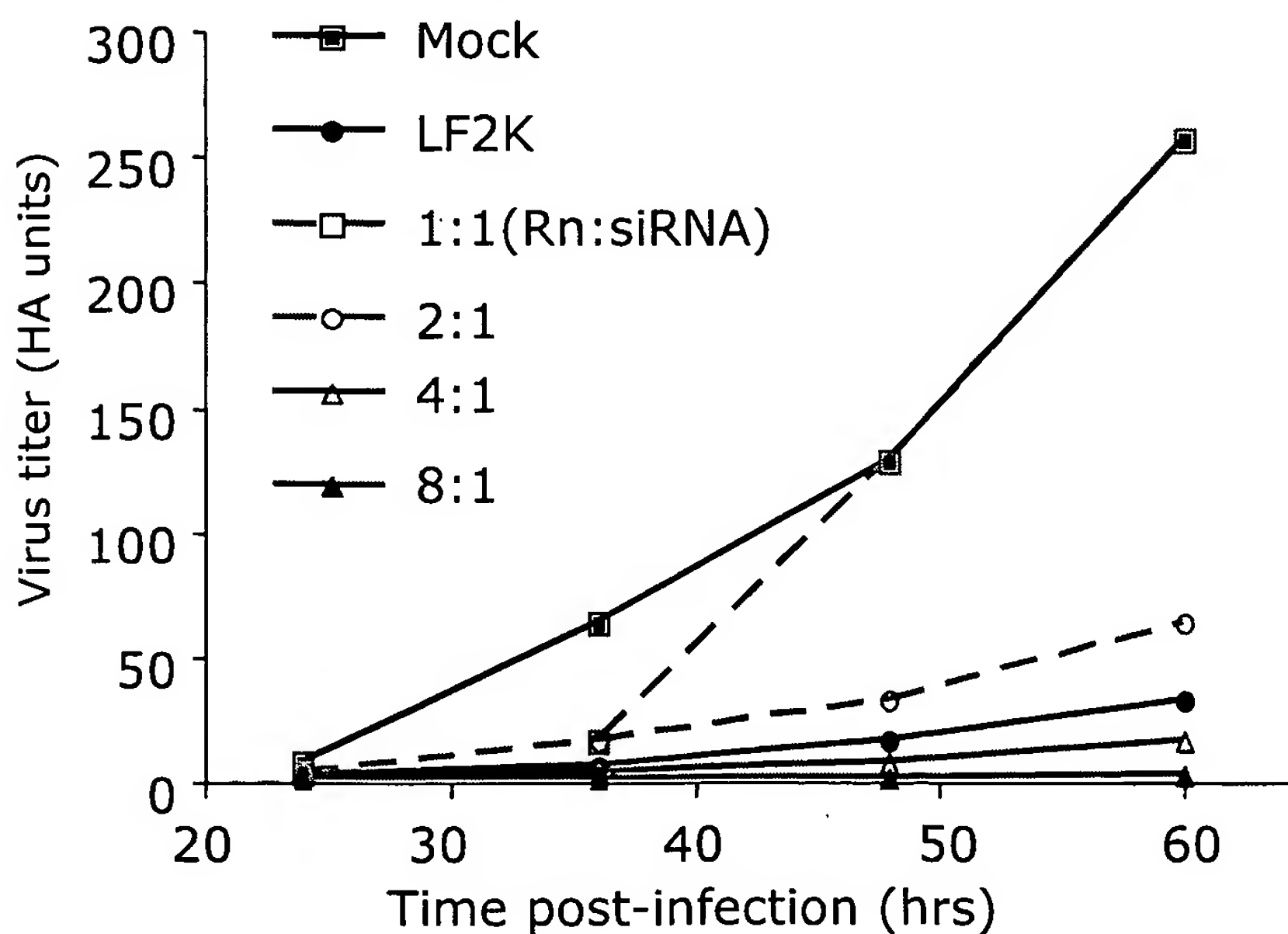


FIG. 15B

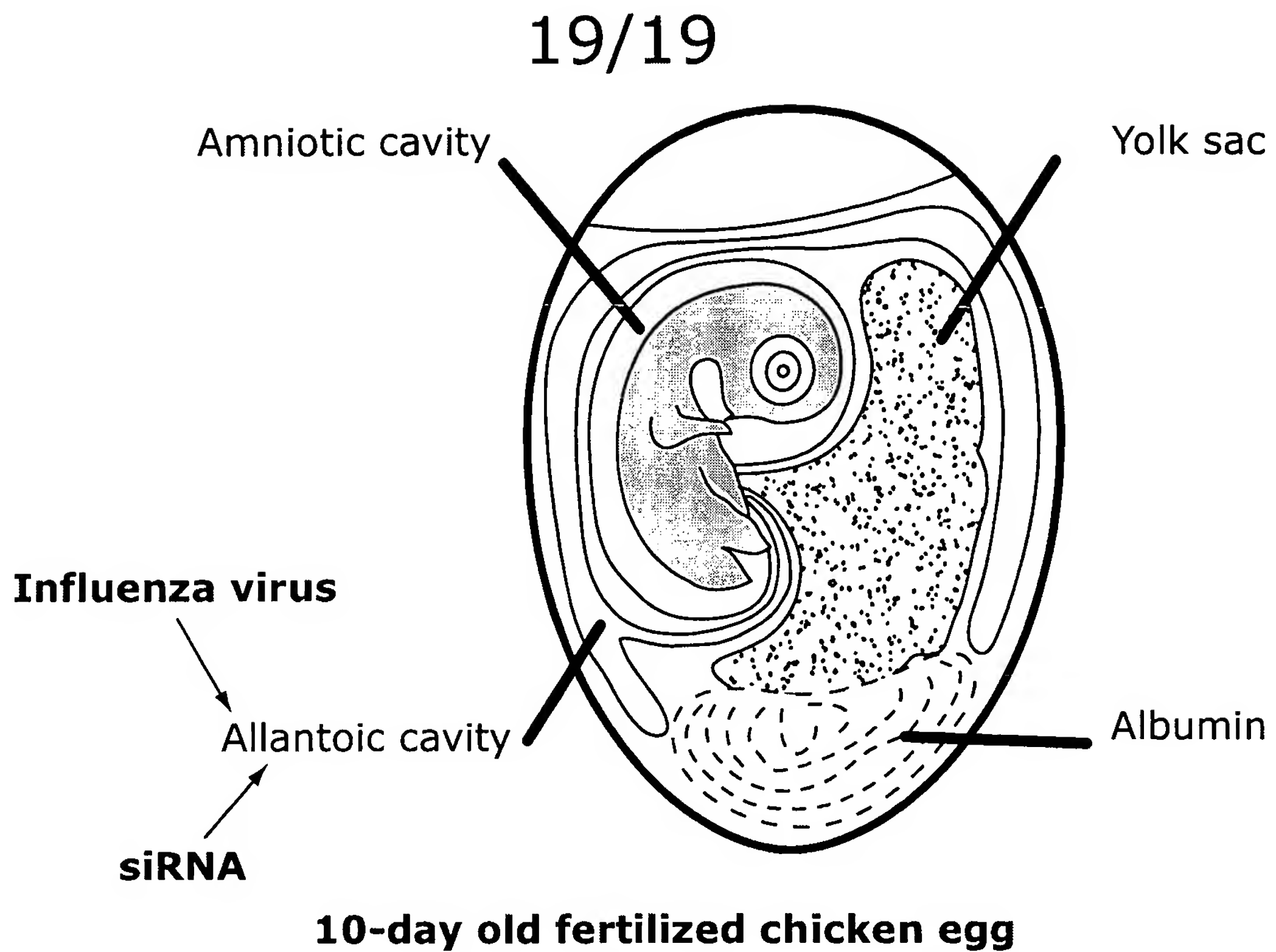


FIG. 16A

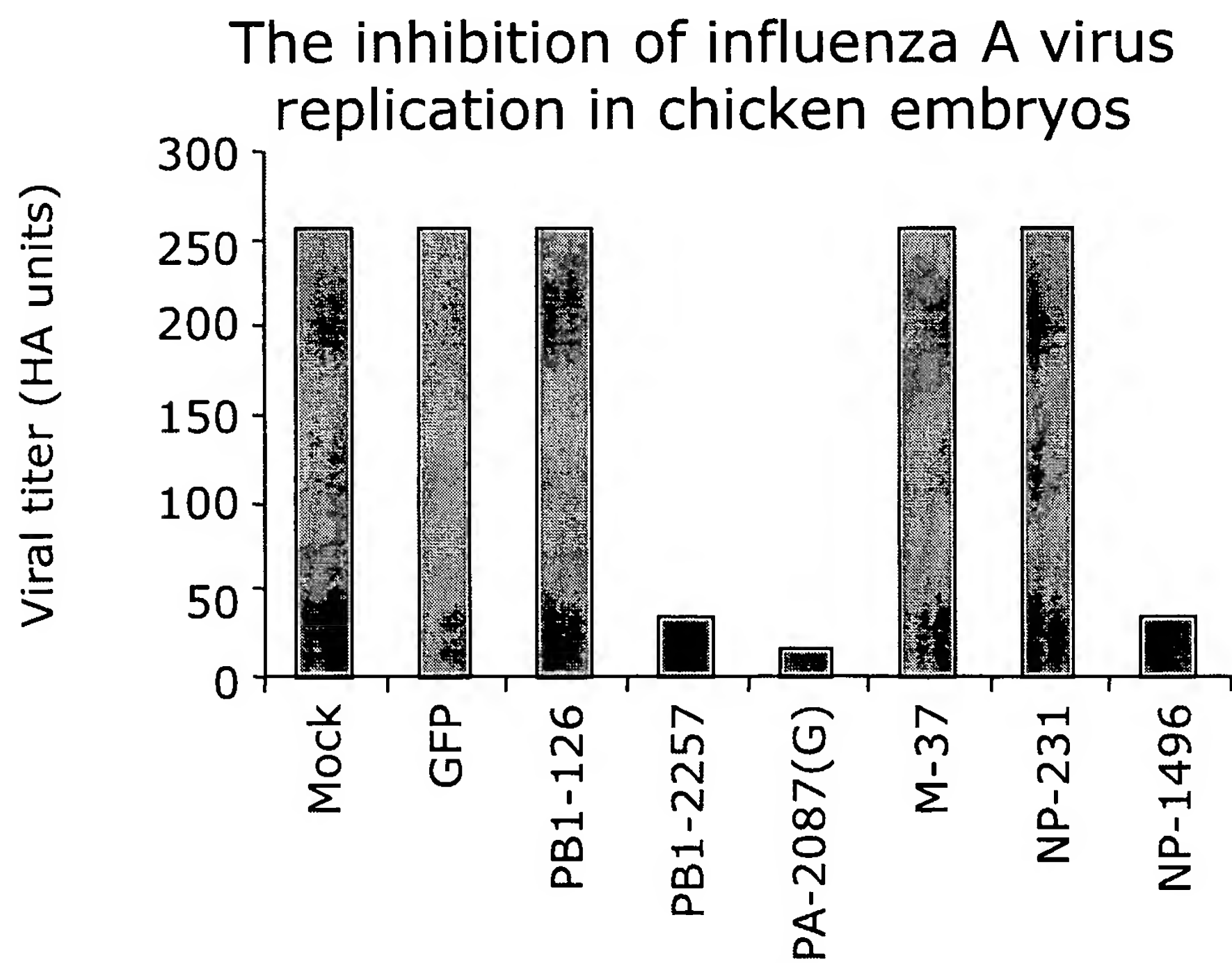


FIG. 16B